The Examiner's Assertion of Official Notice

The Examiner stated that "[o]ne skilled in the art knows different types of memories and their design pros and cons (e.g., speed/reliability vs. cost); examiner takes official notice on *such well known types and usage of memories*" (emphasis added). This assertion of official notice is respectfully traversed. The Examiner does not specifically state what well known types and usage of memories he is referring to. Furthermore, the Examiner does not specifically refer to any types or usage of memories. Applicant respectfully observes that it is unclear what the Examiner is taking official notice of.

Independent Claims 1, 8, 20, and 31

Claims 1, 8, 20, and 31 recite a "network storage device" including "*a solid-state non-volatile memory*" (emphasis added). The Examiner stated that "the difference between the claimed limitations and the teachings of Hoese reference is that the Hoese reference does not expressly disclose a specific type of memory device" and that the "Tuma reference discloses a specific type [of memory device] as claimed for better speed and reliability of data." The Examiner further stated that "it would have been obvious at the time the invention was made to one having ordinary skill in the art to incorporate the Tuma's teachings into Hoese's teachings." Applicant respectfully disagrees. A proper §103 rejection requires that the recited references teach or suggest the combination of elements in a rejected claim. Neither Hoese nor Tuma teach or suggest the combination of the network storage device recited in claims 1, 8, 20, and 31 and a solid-state non-volatile memory. Thus, it would not have been obvious to one of ordinary skill in the art to combine the embodiments of the present invention. Hoese discloses a storage network but does not disclose a specific type of memory device, as acknowledged by the Examiner. Tuma discloses an address generator for a solid state disk drive device. However, while Tuma

does make frequent mention of a "solid state disk," Tuma does not disclose a solid-state non-volatile memory. Since Tuma does not even disclose a solid-state non-volatile memory, Tuma cannot teach or suggest the combination of a solid-state non-volatile memory and a network storage device.

Since a proper §103 rejection requires that the recited references teach or suggest the combination of elements in a rejected claim, Applicant therefore believes that claims 1, 8, 20, and 31 are patentable over the cited references.

Dependent Claims 2, 3, 7, 9, 10, 11, 14, 15, 16, 22, 23, 26, and 27

The arguments set forth above are equally applicable to dependent claims 2, 3, 7, 9, 10, 11, 14, 15, 16, 22, 23, 26, and 27. Claims 2, 3, and 7 are dependent on claim 1. Claims 9, 10, 11, 14, 15, and 16 are dependent on claim 8. Claims 22, 23, 26, and 27 are dependent on claim 20. Since the base claims are allowable, the dependent claims must also be allowable. Applicant therefore believes that claims 2, 3, 7, 9, 10, 11, 14, 15, 16, 22, 23, 26, and 27 are patentable over the cited references.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

The Second 35 U.S.C. §103 Rejection

Claims 4-6, 9, 12, 13, 21, 24, 25, and 28 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Hoese in view of Tuma as applied to claims 1-3, 7-11, 14-16, 20, 22-23, 26-27, and 31 above, and further in view of Dornier et al. (U.S. Pat. No.: 5,835,955). This rejection is respectfully traversed.

<u>Dependent Claims 4, 5, 6, 9, 12, 13, 21, 24, 25, and 28</u>

For the reasons stated above, Hoese fails to teach or suggest the elements recited in claims 1-3, 7-11, 14-16, 20, 22-23, 26-27, and 31. For the reasons stated above, Tuma also fails to teach or suggest the elements recited in claims 1-3, 7-11, 14-16, 20, 22-23, 26-27, and 31. Since claims 4-6 are dependent from claim 1 and claim 1 is allowable, claims 4-6 must also be allowable. Since claims 9, 12, and 13 are dependent from claim 8 and claim 8 is allowable, claims 9, 12, and 13 must also be allowable. Since claims 21, 24, 25, and 28 are dependent from claim 20 and claim 20 is allowable, claims 21, 24, 25, and 28 are allowable.

In addition, claims 4, 5, 6, 9, 12, 13, 21, 24, 25, and 28 recite a "network storage device...further comprising a volatile memory...for *caching* said data" (emphasis added). The Examiner stated that the "Dornier reference teaches such benefit of having cache" and that "it would have been obvious to one having ordinary skill in the art to add the commonly known & practiced cache technique in the art of Hoese & Tuma." Applicant respectfully disagrees. A proper §103 rejection requires that the recited references teach or suggest the combination of elements in a rejected claim. Hoese, Tuma, and Dornier do not teach or suggest the combination of the network storage device recited in claims 4, 5, 6, 9, 12, 13, 21, 24, 25, and 28, a solid-state non-volatile memory, and a cache. Thus, it would not have been obvious to one of ordinary skill in the art to combine the embodiments of the present invention. For the reasons stated above, neither Hoese nor Tuma teach or suggest the combination of a network storage device and a solid-state non-volatile memory. Furthermore, neither Hoese nor Tuma teach or suggest a cache. Thus, neither Hoese nor Tuma teach or suggest the combination of a network storage device, a solid-state non-volatile memory, and a cache. Dornier also does not teach or suggest the combination of a network storage device, a solid-state non-volatile memory, and a cache. Dornier discloses a disk array server with a cache and a log drive. Although Dornier makes

reference to recording data on "the *non-volatile* log drive" (emphasis added), col. 2, line 54, Dornier does not teach or suggest that the log drive could be a *solid-state* memory. Since Dornier does not even teach or suggest a *solid-state* non-volatile memory, Dornier cannot teach or suggest the combination of a network storage device, a solid-state non-volatile memory, and a cache.

Since a proper §103 rejection requires that the recited references teach or suggest the combination of elements in a rejected claim, Applicant therefore believes that claims 4, 5, 6, 9, 12, 13, 21, 24, 25, and 28 are patentable over the cited references.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

The Allowable Claims

The Examiner stated that "[c]laims 17-19 & 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." Claims 17-19 are ultimately dependent on claim 8. Claims 29-30 are ultimately dependent on claim 20. For the reasons stated above, claims 8 and 20 are allowable. Consequently, claims 17-19 and 29-30 must also be allowable.
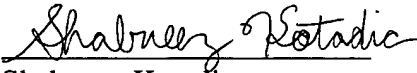
In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

It is believed that the above-identified patent application is now in condition for allowance.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Respectfully submitted,
BiTMICRO Networks, Inc.

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Shabneez Kotadia
Reg. No. 53,153

BiTMICRO Networks, Inc.
45550 Northport Loop East
Fremont, CA 94538
(510) 623-2341